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Yoshiki Nobuto

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OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, L.L.P.  
1940 DUKE STREET  
ALEXANDRIA, VA 22314

EXAMINER

STEELE, JENNIFER A

ART UNIT

PAPER NUMBER

1794

NOTIFICATION DATE

DELIVERY MODE

12/28/2009

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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<b>Office Action Summary</b>	<b>Application No.</b> 10/765,834	<b>Applicant(s)</b> NOBUTO ET AL.	
	<b>Examiner</b> JENNIFER STEELE	<b>Art Unit</b> 1794	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 14 September 2009.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) 7 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                    | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)         | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                          |

***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

1. **Claim 1-6 rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement.** Any negative limitation or exclusionary proviso must have basis in the original disclosure. The mere absence of a positive recitation is not basis for an exclusion. Any claim containing a negative limitation which does not have basis in the original disclosure should be rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. See *Ex parte Grasselli*, 231 USPQ 393 (Bd. App. 1983), *aff'd mem.*, 783 F.2d453 (Fed. Cir. 1984). The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claim recites the limitation "wherein microfine fiber bundle (A) does not contain microfine fibers made of non-elastic polymers and that microfine fiber bundle (B) does not contain microfine fibers which have a single fiber fineness of 0.5 dtex or less and which are made of an elastic polymer having a JIS A hardness of 90-97."

The invention is directed to a "leather-like sheet substrate comprising a fiber entangled nonwoven fabric" as recited in Claim 1. The bundles (A) and (B) are combined to form a nonwoven sheet that is entangled. The specification teaches the method of entanglement is by a known method such as needle punching and high

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pressure hydroentanglement [0051]. As the bundles are entangled then the bundles would not remain intact and the nonwoven fabric would have a mixture of (A) microfibrillar fibers and (B) microfibrillar fibers. The specification does not support or teach that the nonwoven fabric has separate and exclusive bundles of (A) and (B) where (A) and (B) are not mixed by entangling. The claim does not describe that the bundles (A) remain intact and stick together and do not mix together.

The specification teaches that the microfibrillar fiber bundle (A) is made of elastic polymer and does not include the non-elastic polymer as described in Spinning Examples 1-4 [0082]-[0087]. The specification teaches that the microfibrillar fiber bundle (B) is made of non-elastic polymer as described in Spinning Example 5 [0088]. The limitation has support in the specification for the process of making the fiber bundles where bundle (A) does not include non-elastic polymer and the process of making fiber bundle (B) that does not include elastic polymer. However, the bundles as claimed are an intermediate structure that then is destroyed by the entanglement processing step so that the article claimed would not meet the limitation in the claim.

### ***Allowable Subject Matter***

2. Claim 2 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Claim 2 describes the bundle (A) laterally stick together while keeping their original fibrous shape and that the sticking length is 2/3 or

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less of the fiber diameter, which is not taught or suggested by the applied prior art of record.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**3. Claim 1 and 6 rejected under 35 U.S.C. 103(a) as obvious over Nakayama (referred to as Takeshi et al in a previous Office Action of 11/27/2007) EP 1067234**

**A.**

The Nakayama reference teaches a fibrous substrate for artificial leather, comprising microfine fiber bundles of elastic fibers (A) and a microfine fiber bundles of nonelastic fibers (B). The weight ratio of (A) to (B) bundles is 10/90-60/40. The current application teaches a fibrous substrate with weight ratio of (A) and (B) bundles within this range of 30/70 and 70/30. The Nakayama reference teaches 3-50 numbers of microfine fibers (A) or fineness 0.5 denier or less which is considered the same as current application claim 1 of 10-100 microfine fibers of 0.5dtex. The Nakayama reference teaches 15 or more numbers of microfine fibers (B) while the current application does not specify the number of (B) microfine fibers.

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Nakayama teaches that it is known in the art to employ fiber bundles of elastic polymers and fiber bundles of non-elastic polymers separately made into fiber bundles [0005].

While Nakayama does not teach that microfine fibers (A) have JIS A hardness between 90-97, Nakayama teaches the microfine fibers (B) circle the elastic microfine fibers (A) so that the elastic fibers do not stick together. Nakayama teaches the ratio of elastic polymer to nonelastic polymer is important to avoid agglutination which results in a dense structure that is hard [0010]. Optimizing the hardness for the elastic polymer would reduce the tackiness of the polymer and therefore reducing the agglutination of the fibers resulting in fibers that do not stick together. It would have been obvious to employ an elastic polymer with the desired hardness motivated to produce an elastic fabric that has flexibility and drape.

As to Claim 6, Nakayama teaches impregnating the substrate with an elastic polymer as stated in Claim 1. Nakayama teaches coating at least one surface of the substrate with a resin layer (claim 7). A resin layer is a film.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

**4. Claim 1 and 6 rejected under 35 U.S.C. 103(a) as being unpatentable over Nakayama EP 1067234 A in view of Yamakawa et al (US 6,784,127). Claim 1**

describes a leather-like sheet substrate comprising:

- a fiber entangled nonwoven fabric that comprises
- a microfine fiber bundle (A)
- and a microfine fiber bundle (B)
- in a blending ratio (A)/(B) of 30/70 to 70/30 by mass and a polymeric elastomer contained in the fiber-entangled nonwoven fabric,
- the microfine fiber bundle (A) comprising
  - 10-100 microfine fibers each of which has a single fiber fineness of 0.5 dtex or less
  - and which are made of an elastic polymer having a JIS A hardness of 90-97
- the microfine fiber bundle (B) comprising
  - a microfine fiber which has a single fiber fineness of 0.5 dtex or less
  - and which is made of non-elastic polymer

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- wherein microfine fiber bundle (A) does not contain microfine fiber made of non-elastic polymers and
- that microfine fiber bundle (B) does not contain microfine fibers which have a single fiber fineness of 0.5 dtex or less and which are made of an elastic polymer having a JIS A hardness of 90 to 97.

The Nakayama reference teaches a fibrous substrate for artificial leather, comprising microfine fiber bundles of elastic fibers (A) and a microfine fiber bundles of nonelastic fibers (B).

The weight ratio of (A) to (B) bundles is 10/90-60/40. The current application teaches a fibrous substrate with weight ratio of (A) and (B) bundles within this range of 30/70 and 70/30.

The Nakayama reference teaches 3-50 numbers of microfine fibers (A) or fineness 0.5 denier or less which is considered the same as current application claim 1 of 10-100 microfine fibers of 0.5dtex.

The Nakayama reference teaches 15 or more numbers of microfine fibers (B) while the current application does not specify the number of (B) microfine fibers.

Nakayama teaches that it is known in prior art to employ fiber bundles of elastic polymers and fiber bundles of non-elastic polymers separately made into fiber bundles which meets the claim limitation that bundles (A) do not contain the polymers of bundles (B) and conversely (B) bundles do not contain (A) fibers [0005]. Nakayama is teaching that the microfine fiber bundles comprise both elastic fibers and nonelastic fibers in order to improve upon prior art embodiments where the elastic fibers agglutinate into



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larger denier fibers and where the non-elastic fibers are not bound by elastic fibers.

While Nakayama's claimed invention is teaching producing microfine fiber bundles of blended elastomeric polymer fibers and nonelastomeric polymer fibers as an improvement, this teaching does not exclude the prior art referenced that teaches it would be known to employ fiber bundles of elastomeric and nonelastomeric polymer separately.

Nakayama teaches that an elastic polymer cannot be made into microfibers according to the prior art, so that the texture and appearance like natural leather cannot be gained (col. 2, lines 48-49). Thus Nakayama teaches elastic microfine fibers and nonelastic microfine fibers are integrated into bundles so that the elastic polymer does not agglutinate to each other upon extraction of the sea component. Nakayama teaches the ratio of elastic polymer to nonelastic polymer is important to avoid agglutination which results in a dense structure that is hard (col. 5, lines 52-57). Nakayama teaches the number of strands of elastic fibers and nonelastic fibers as well as the denier less than 1 is important to achieving the desired fabric with surface denseness and smoothness (col. 5, lines 13-50). Nakayama teaches the fabric is entangled and therefore the fibers will be mixed. Nakayama teaches a ratio of elastic and nonelastic microfine fibers and the structural limitation ranges that produce an elastic leather-like fabric and therefore presents a finding that one of ordinary skill in the art would have recognized that employing a ratio of elastic to non-elastic microfine fibers and fiber bundles would have yielded predictable results.

Nakayama does not teach the microfine elastomeric fibers (A) have a JIS A hardness between 90-97. Hardness is a property inherent in the elastomeric polymers as claimed. Elastomeric polymers are known in the art to be comprised of hard and soft segments as evidenced by Yamakawa.

Yamakawa teaches a synthetic leather comprised of a polyurethane elastomer fiber having a Shore hardness A of 92 or more. Yamakawa teaches the synthetic leather has excellent elasticity and also high tear strength (ABST). Yamakawa teaches the hardness of the polyurethane depends on the mixing ratio of the respective components. Yamakawa teaches the fibers are spun and the fiber diameter of the filaments is preferably within the range of 5 to 50 micron. Yamakawa teaches the smaller the fiber diameter the more flexible the resulting nonwoven fabric becomes (col. 4 and 5, lines 64-67 and 1-2).

It would have been obvious to select an elastomeric polymer with a hardness in the claimed range motivated to achieve the desired properties of elasticity and strength and softness and drape.

**5. Claim 3-5 rejected under 35 U.S.C. 103(a) as being unpatentable over Nakayama EP 1067234 A in view of Yamakawa et al (US 6,784,127) and in further view of Kato et al. (US 4,476,186).** The Nakayama reference teaches a fibrous substrate for artificial leather, comprising microfine fiber bundles of elastic fibers (A) and a microfine fiber bundles of nonelastic fibers (B). As to claims 4-5, Nakayama does not

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teach that the raised single fibers of the microfine fiber in the fiber bundle (A), that further do not stick to each other.

Kato teaches an entangled non-woven fabric having a fiber structure which comprises an ultrafine fiber bundle of fiber size not greater than about 0.5 denier that are entangled so that a portion (A) of the fiber bundles are entangled with one another and another portion (B) of the ultrafine fiber bundles have the fine fibers branching from the bundles (ABST). Kato teaches that the ultrafine fibers and fine bundles of ultrafine fibers are entangled with one another and in which both portions (A) and (B) are nonuniformly distributed in the direction of fabric thickness (col. 2 lines 40-43). Kato teaches the fiber sheet is treated with high speed fluid jet streams to branch the ultrafine fibers to fine bundles of ultrafine fibers and to simultaneously entangle the fibers and their bundles (col. 10, lines 35-39). Kato teaches this structure relates to a grained sheet having on at least one of its surfaces a grain formed by the fiber structure composed of ultrafine fibers to fine bundles of ultrafine fibers and having a distance between the fiber entangling points of not greater than about 200 microns and a resin in the gap portions to the fiber structure (ABST). Kato teaches a non-woven fabric for synthetic leather and teaches a grained surface that improves flexibility, shearing fatigue resistance and scratches and scuff resistance (col. 2, lines 26-30). Kato teaches a suede-like surface having a dense and beautiful fluff and the fluff was seen continuing from the secondary fiber bundles (col. 18, lines 28-30). Kato teaches the surface of the finished sheet had a grain that was composed of the fibrillated fibers and the resin encompassing the fibrillated fibers (col. 18, lines 20-30).

It would have been obvious to one of ordinary skill in the art to produce a leather-like substrate of Nakayama with the structure of Kato motivated to produce a suede-like surface and a grain that is flexible, durable and soft.

As to Claim 3, Nakayama differs from the claimed invention because it does not teach that a powder is present within the fibrous material of (A). Kato et al references using fine particles or fillers to form the grain and facilitate fibrillation. See US 4476186 col. 1 line 50. Kato's inventions claim Ultrafine Fiber Entangled Sheet non-woven fabrics having a fiber structure that comprises a portion (A) of ultrafine fiber bundles entangled with (B) of ultrafine fiber bundles. Kato's inventions both reference various fillers and fine particles that can be added to improve grain and fibrillate fibers. Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to have incorporated a fine particle into the entangled non-woven substrate sheet motivated by the expectation of improved grain and fiber fibrillation.

**6. Claim 3 rejected under 35 U.S.C. 103(a) as being unpatentable over Nakayama in view of Yamakawa et al (US 6,784,127) and in further view of Minami, EP 1213377 A1.** Nakayama discloses an artificial leather material as set forth in the preceding paragraph. Nakayama differs from the claimed invention because it does not teach that a powder is present within the fibrous material of (A). Minami teaches use of a powder affixed in nonwoven fabric manufactured from islands-in-sea type fibers. Minami claims a powders-affixed nonwoven fabric comprising of powders less than 50 micron, affixed in fiber web of fiber diameter of 4 micron or less with a length of 3 mm or

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less and cite examples using fibers of 0.5 denier. Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to have incorporated a fine particle into the entangled non-woven substrate motivated by the expectation that this would enhance fibrillation of the fiber material of Nakayama.

### ***Double Patenting***

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

14. Claims 1, 2, 4-6 rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 1 and 15 of U.S. Patent No. 6767853.

Although the conflicting claims are not identical, they are not patentably distinct from each other because both claim a fibrous substrate for artificial leather-like fabric comprising microfine fiber bundles (A) and (B). One of ordinary skill in the art could

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have produced a nonwoven comprising microfine fiber bundles (A) and (B) of elastic and non-elastic polymers microfibers motivated to produce a leather-like sheet.

### ***Response to Arguments***

7. Applicant's arguments with respect to claim 1-6 have been considered but are moot in view of the new ground(s) of rejection. The previous 35 USC 112 1<sup>st</sup> paragraph rejection has been withdrawn and new rejection written. As a result this Office Action is being made Non-Final. Examiner agrees that the microfine bundles (A) do not include non-elastic polymer and the microfine bundles (B) do not include elastic polymer. However, claim 1 as written describes a "leather-like sheet comprising a fiber entangled nonwoven fabric that comprises a microfine fiber bundle (A) and a microfine fiber bundle (B). As the claim describes the nonwoven is entangled, the bundles of (A) fibers would mix with the bundles of (B) fibers.

As to claim is written, the bundles of (A) are produced without any non-elastic fibers or (B) fibers but then the bundles of (A) are entangled with the bundles of (B). The process of making the bundles (A) without non-elastic (B) fibers is different from the prior art, however as the bundles (A) are then entangled with (B) in the same blending ratio as the prior art, the resultant sheet would have the same mixture of (A) and (B) microfibers.

Upon further consideration the 35 USC 102(e) and (b) rejections over Nakayama are withdrawn as Examiner has not presented the rationale for the inherency of the JIS hardness of the elastic polymer. The grounds of rejection over Nakayama is now a 35

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USC 103 rejection. As Nakayama (US 6,767,853) was published after the filing date of the present Application, this rejection is also withdrawn. The 35 USC 103 rejection over Nakayama is over the published reference EP 1067234.

8. Applicant's arguments with respect to Nakayama are not persuasive as Examiner explained with respect to the 35 USC 112 1st paragraph rejection. Examiner is persuaded that the microfine fiber bundles (A) are produced without the non elastic polymer and the microfine fiber bundles (B) are produced without the elastic polymer, however the nonwoven is comprised of bundles that are entangled together. The nature of the entangling process would mix the fibers of (A) and (B) together and therefore be anticipated by Nakayama.

9. Applicants argue that Nakayama-US [0004] discloses that the fineness of the elastic polymer that can be industrially produced exceeds 2 denier. This references to the fiber size is not the claimed microfine fiber size that Nakayama teaches. Nakayama teaches the average fineness of microfine fibers (A) is 0.5 denier or less and of (B) is 0.2 denier or less [0011]. A denier of 0.5 and 0.2 are equivalent to 0.55 dtex and 0.22 dtex and in the claimed range.

10. Applicants argue the rejection over Nakayama in view of Yamakawa and Nakayama in view of Yamakawa and Minami. Applicant's arguments are directed to the arguments presented by Examiner in the Office Action of 4/13/2009 that Applicant had embodiments within the claimed range that did not pass Applicant's own tests for fibers not sticking together. Applicant has clarified that the number of islands is equated with the fibers per bundle. Therefore it is clear if the number of fibers per bundle is outside

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the claimed range, the desired properties are not achieved. Therefore the examples presented by the Applicant are consistent with Applicant's claims that the fibers per bundle of (A) must be between 10-100 and the JIS hardness of 90-97 both must be present to achieve the desired properties.

The rejection over claims 1 and 3-5 are maintained as the rejection over independent claim 1 has been maintained.

Claim 2 would be held as allowable if claim 2 is rewritten in independent form to include all of the limitations of the independent claim 1.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JENNIFER STEELE whose telephone number is (571)272-7115. The examiner can normally be reached on Office Hours Mon-Fri 8AM-5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rena Dye can be reached on (571) 272-3186. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/J. S./  
Examiner, Art Unit 1794

/Rena L. Dye/  
Supervisory Patent Examiner, Art  
Unit 1794

12/16/2009